



SIEBTECHNIK TEMA

ST ReAM

SIEBTECHNIK TEMA Remote Advanced Monitoring

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The digital module for preventive centrifuge maintenance with optional Cloud connection

Safeguard machine operation and your corresponding production process!

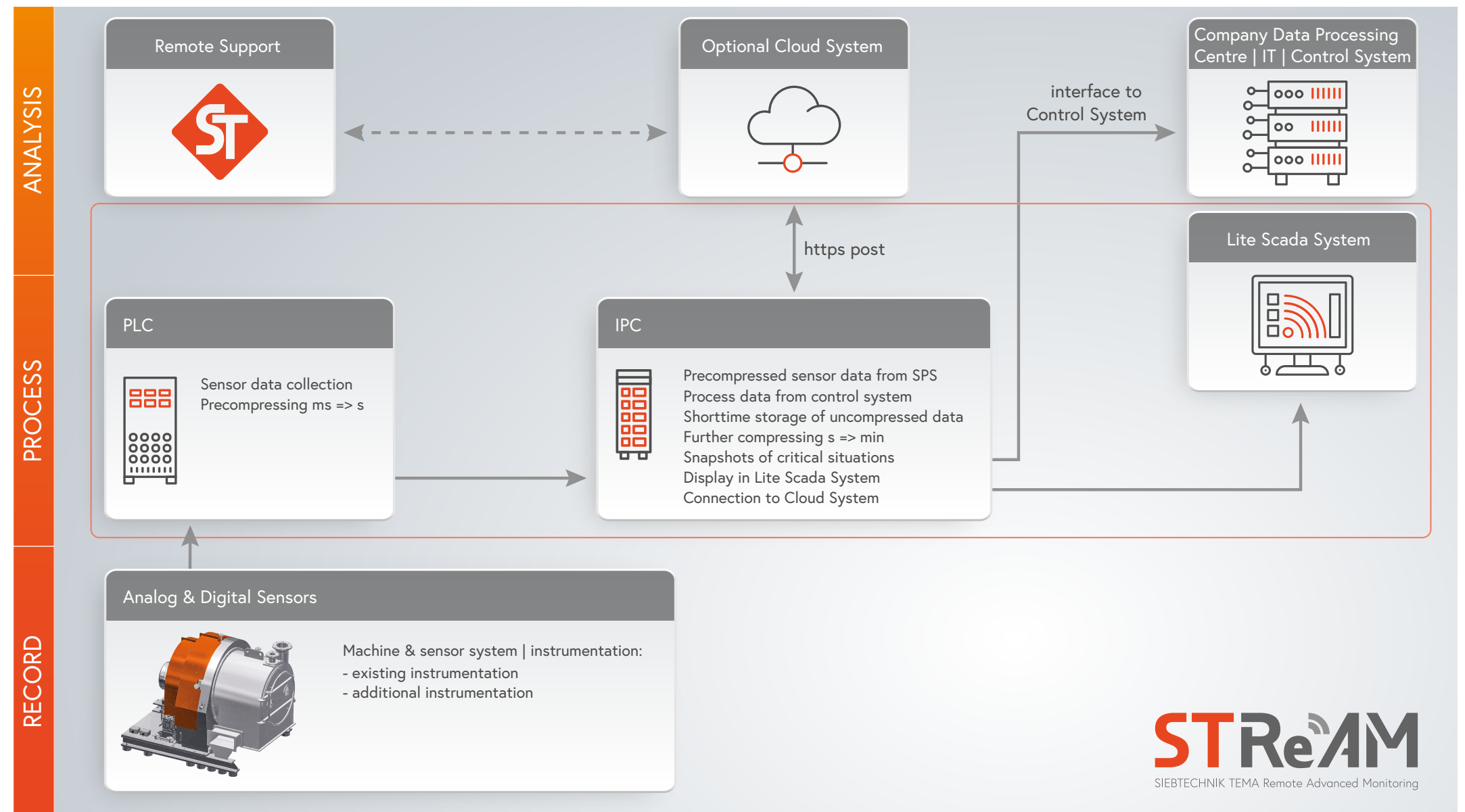
With **STReAM**, SIEBTECHNIK TEMA offers an innovative and flexible tool for optimizing preventive maintenance & downtime planning.

Our centrifuges constitute key equipment in many facilities. They de-water, clarify and wash numerous products and make a highly efficient contribution to successful plant operation.

It is a top priority for our customers, and thus also for us, that production is safeguarded. Irregularities in operation need to be corrected as quickly as possible, before malfunctions or machine failure become possible. For decades we have been applying our expertise to supporting our customers in this field.

Nowadays, monitoring of centrifuge operation and early detection of malfunctions are indispensable steps in timely decision-making and to facilitate timely intervention. In many cases, extensive sensor technology is already in use for continuous monitoring of machine operation. Often, however, there is a lack of suitable processing and correlation of data to permit appropriate analysis. A systematic digital solution is required.

With **STReAM**, SIEBTECHNIK TEMA offers an innovative and flexible tool for optimizing preventive maintenance and downtime planning, thus safeguarding machine operation and your corresponding production process.



STReAM
SIEBTECHNIK TEMA Remote Advanced Monitoring

Features:

- ◆ IT database for OT from the centrifuge (Operational Technology)
- ◆ potential connection to additional available cloud systems
- ◆ Channeled data and information exchange possible with SIEBTECHNIK TEMA
 - ◆ Analysis and recommendations based on benchmarking
 - ◆ Remote support in the event of operational malfunctions and anomalies
- ◆ Clearly structured and user-friendly dashboard
- ◆ Toolkit for creating your own dashboards
- ◆ Simple user management for e.g. rights, display options and notifications
- ◆ Chat function

with Cloud connection:

- ◆ Channeled data and information exchange with SIEBTECHNIK TEMA
- ◆ Long-term storage in the cloud with max., min., average values and deviations
- ◆ Simple, worldwide access for all **authorized** users via the cloud portal
- ◆ Up-to-date documentation & reports available via cloud portal
- ◆ Regular analysis and recommendations based on benchmarking
- ◆ Notifications & remote support in the event of operational malfunctions and anomalies
- ◆ "Secure remote maintenance" option integrated and deployable
- ◆ Option for mobile internet connection

Digital processing of operating data

The digital processing of operating data allows state-of-the-art monitoring, analysis and continuous improvement of centrifuge operation. The **modular structure of STReAM** forms the basis here for a modern, optimized connection tailored to your business.

Regular or event-oriented machine analysis

For regular or event-related machine analysis, you can of course rely on the experience of our centrifuge specialists. Data transfer with **STReAM** is simple and absolutely secure.

Structure & functionalities

- ◆ Autonomous sensor data box, independent of the main control system/switchboard
- ◆ iPC Edge Computing: On-site data storage and visualization
- ◆ Online dashboarding and long-term storage
- ◆ Interface/data provider for MES, ERP, cloud services (additional costs may be necessary)

STReAM records the machine's own centrifuge sensor technology and, if desired, also specific process sensor technology relevant for operation of the machine. The machine data is digitalized, the operation of your centrifuge can thus be analyzed transparently and regularly, even live. The cloud monitoring database operates in real time.

You have control over your data!

Full ownership of the data naturally lies with you! You retain all rights, titles and interest in your data.

Strict compliance with applicable norms and standards

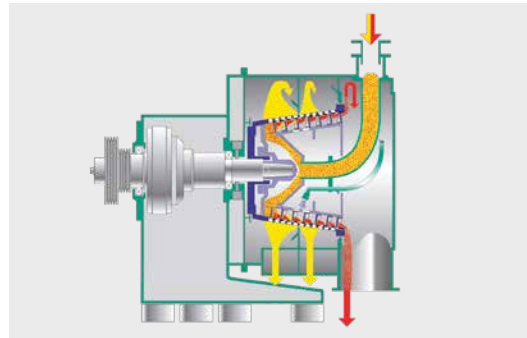
- ◆ NIST SP800 certified
- ◆ State-of-the-art technology & security procedures
- ◆ Regular cybersecurity audit with regular penetration tests and code scans (based on ISO 27001, IEC 62443)
- ◆ Secure Development Life Cycle (SDLC)
- ◆ MS Azure cloud security

Easy integration into customer networks

- ◆ 443 port (standard https)
- ◆ Fixed IP address & domains
- ◆ TLS encryption

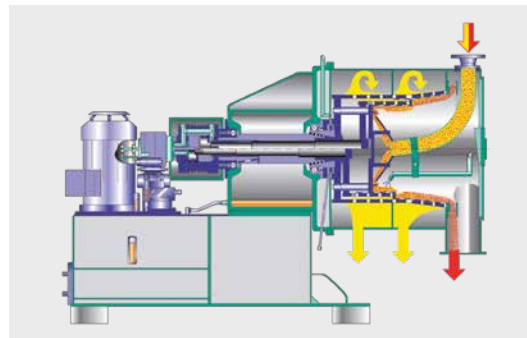
Continuous centrifuges are the best solution for mechanical separation of solids from liquids from technical and economical point of view. They can dewater large quantities of solids to low final moistures, while needing little space, energy or time.

FILTERING CENTRIFUGES



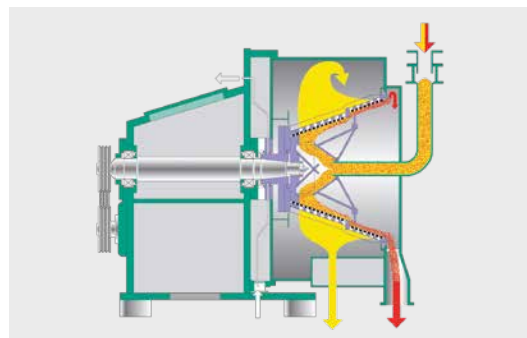
CONTURBEX | screen scroll centrifuge

The most versatile of our continuously operating filtration machines are our screen scroll centrifuges. The cantilever design provides a clear separation of drive end and product housing with only one shaft feedthrough. The solids retained by the screening element are conveyed by the drum inclination and by a scroll with slightly different rotational speed from the small to the large diameter. The feed particle size of the solids to be separated is ideally greater than 80 µm.



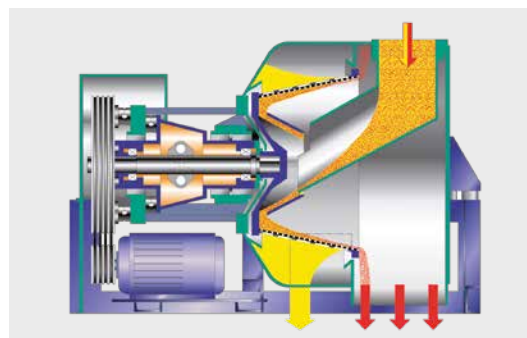
SHS | pusher centrifuge

In the pusher centrifuge, the solid matter is retained on a wedge wire basket and pushed ring by ring to the solid discharge by means of a oscillating plate. With the low transport speed of the thick layer of retained solids, the machine design allows high retention time, low fine losses and minimal particle breakage. Furthermore, the multi-stage design allows high washing efficiency through displacement washing.



TURBOCASCADE | sliding centrifuge

The TURBOCASCADE is specially developed for de-watering solids with a uniform particle size of 0.5 mm and larger. The particles slide individually, i.e. not in a closed layer, over the screens arranged in stages. Despite the very short residence time of the individual particles in the centrifuge, final moistures as low as 0.01 % can be achieved.



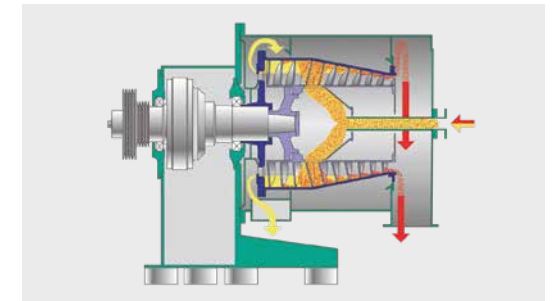
HSG | vibrating centrifuge

Our largest capacity machines, these vibrating centrifuges process up to 450 tph of solids. The particles are retained on the screen basket and conveyed from the small to the large diameter by an axial vibration superimposed over the centrifugal motion. The most common applications are dewatering coal, sea salt and sand.

SEDIMENTING CENTRIFUGES

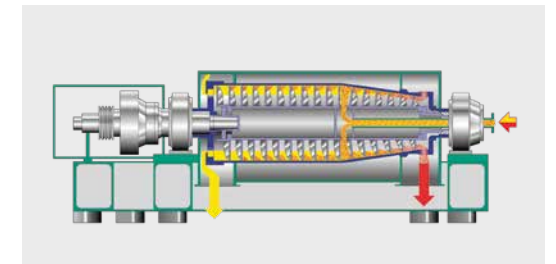
SHORTBOWL | decanter centrifuge

The SHORTBOWL decanter with cantilever design is the optimal solution for hot applications and high cleaning requirements. Pre-condition for the use of an SBD due to the cantilever-design are good sedimentation properties respectively high density differences between liquid and solid.



DZ | decanter centrifuge (solid bowl)

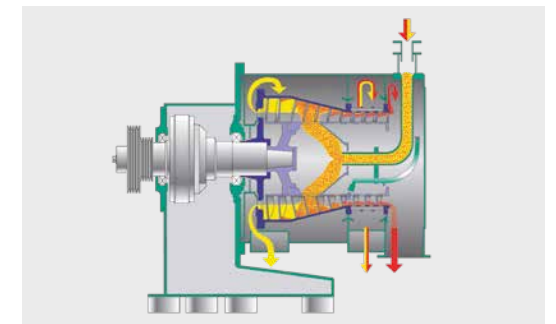
In decanter centrifuges, very fine solids are separated from liquids with a lower specific gravity. The solids sediment from the liquid due to the centrifugal forces inside the rotating bowl. The settled solids are then transported to the small diameter by a scroll and discharged there. The clarified liquid exits the machine via an adjustable weir at the cylindrical end of the bowl.



HYBRID CENTRIFUGES

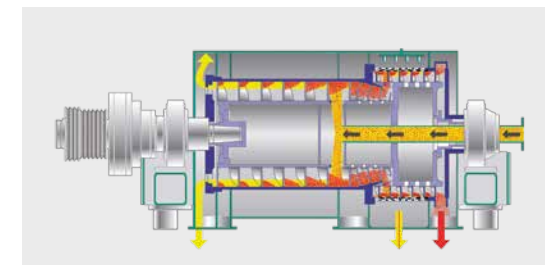
CONTHICK | screen bowl decanter centrifuge

The design of this centrifuge is based on the cantilever technology. Common to all our hybrid centrifuges is the combination of sedimenting first part with the option to perform a displacement wash. The washing liquid from the screen section can be treated separately.



TURBOSCREEN | screen bowl decanter centrifuge

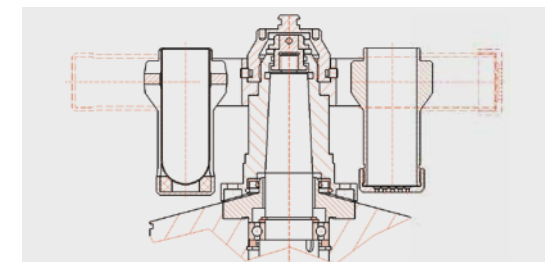
If higher g-forces are necessary, a TURBOSCREEN decanter is the best choice. In case of products with good filtration properties the screen section can be continued directly with the decanter outlet diameter. For products with poor filtration properties the screen diameter can be increased to allow a thin layer filtration and dewatering.



LABORATORY CENTRIFUGES

CENTRIFLEX & CENTRILAB | laboratory centrifuges

The laboratory centrifuges CENTRIFLEX & CENTRILAB are universal centrifuges to examine the options for separation of solids/liquids mixtures under the influence of high centrifugal forces. The wide range of inserts allow applications for filtration, washing, rinsing, clarification and continuous separation of two liquids.





SIEBTECHNIK TEMA

100 YEARS | TAILOR MADE

1922 - 2022

SIEBTECHNIK TEMA offers an extensive product portfolio for a wide range of industries around the world.

As a renowned OEM & system supplier, our group of companies specializes in mechanical engineering, process engineering, components and services. Customized solutions, precisely tailored to the needs of our customers, have been the key to our success for 100 years.

We are experts in the field of solid-liquid separation and processing of bulk mineral materials – with more than 50 local sales offices and representatives worldwide.

Our product portfolio comprises:

Automation Solutions | Decanters | Conveyor Chutes | Gas Pycnometers | Sliding Centrifuges | Control Screening Machines | Laboratory Equipment | Sampling Plants
Sample Preparation | Pneumatic Post Systems | Setting Machines | Screening Machines
| Screen Scroll Centrifuges | Pusher Centrifuges | Vibratory Centrifuges | Dryers
Shredding Machines/Plants